BENCHMARK ▲ ASSESSMENTS

Early Literacy & Mathematics

2023-2024

Interpretive Guide to Early Literacy and Mathematics Reports

Table of Contents

Introduction

What's in this Guide?

This guide is intended to help educators understand and use the results from the Spring Early Literacy and Mathematics Benchmark Assessments. Reports available for this assessment include student level and aggregate level data reports.

Student level reports provide individual student level performance data. The Individual Student Report, Student Roster Report, Domain Analysis Report, and Student Trend Report provide data at the individual student level.

Aggregate level reports provide performance data based on groups of students—groups by grade, by school, by district, ISD, and state. The aggregate level reports are the Demographic Report and Change Report.

Detailed descriptions of each report can be found in Section 4 of this guide.

Also included in this guide are the following sections:

- **Section 2** provides information on item types and how scores are reported.
- **Section 3** explains how to access reports.
- **Section 4** provides detailed descriptions of each report.
- **Section 5** includes additional resources, both for additional information regarding sources of assessment results as well as general information regarding assessments. Users are encouraged to review these additional resources for further information on statewide assessment reporting.
- **Section 6** provides contact information.

Family Educational Rights and Privacy Act (FERPA)

Reports that provide student level data include federally protected student data. It is imperative that report users understand the sensitive and confidential nature of the data presented on Early Literacy and Mathematics Benchmark reports and comply with all Family Educational Rights and Privacy Act (https://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html) regulations.

Invalid and Warning Tests

Invalid	Warning
Tests may be flagged as invalid for the following reasons:	Test may be flagged as warning for the following reasons:
Prohibited Behavior	Not Tested in Enrolled Grade
Nonstandard accommodation administered	Missing Michigan Student Data System (MSDS) Data
Misadministration	

Note about fall data: The fall Early Literacy and Mathematics Benchmark Assessment occurs before the official collection of MSDS data. This means that the demographic data such as English Learner (EL), Students with Disabilities (SWD) and Grade level will not display a student's current status if the data has not been entered in MSDS or their status has changed since last year.

Report Descriptions

Report	Description	Aggregation
Individual Student Report (ISR)	Separated by content area, the ISR provides detailed information on individual students in the Content Area Scale Score Summary and the Content Area Domain Summary. The Content Area Scale Score Summary gives scale score and performance level for the overall content area. The Content Area Domain Summary will show raw scores (points earned out of total points possible) for each domain.	• Individual Student
Student Roster	Separated by content area, this roster provides a list of students by Overall Scale Score, Standard Error, Points Earned by assessment category, and domain subtotal by grade, content, domains, and categories.	• Individual Student
Domain Analysis Report	Separated by content area, this report provides a list of selected students and displays a Content Area Scale Score Table and Domain Performance Tables. The selected student list will display results for students who completed a test in the selected test cycle. Student results for a completed test in another test period (winter and/or fall) will also be displayed.	• Individual Student
Student Trend Report	Separated by content area, this report provides up to three academic years of scale scores for each assessment that was administered. The State and school mean scale score will be displayed for the test cycles as well.	• Individual Student
Demographic Report	Provides a comparison of students by grade and content, aggregated across selected demographic groups, showing mean scale scores and percentages of students in each performance level.	• School • District • State
Change Report	Separated by content area, the Change report displays the total number of students assessed, the Mean Scale Score for All Students in the pre-test, and the Mean Scale Score for All Students in the post-test. It also displays the number of students at each performance level for both the pre-test and the post-test.	• School • District • State

Section 2: Scoring

Scoring by Item Type

All the processes employed to assess overall student performance begin at the item level. There are two types of items on the Early Literacy and Mathematics Benchmark Assessments: Multiple Choice (MC) items and Technology Enhanced (TE) items.

Technology Enhanced Item Scores

Technology Enhanced (TE) items are computer-delivered test questions which include specialized interactions that allow students to respond to tasks that go beyond what can be covered in traditional Multiple Choice. TE items usually require students to produce information, as opposed to simply selecting a choice from answer options. The scoring for all Early Literacy and Mathematics Benchmark Assessments TE items is automated like Multiple Choice items, eliminating the need for human scorers. TE item types include the following:

Drag and Drop—students can drag pictures or words into boxes or "drop zones" to indicate an answer.

Choice Interaction—similar to a multiple-choice item, but the item can have more than four options, and any number of the options can be correct or incorrect.

Hotspot (Count or Selection)—graphics are selectable; for Count, students can choose a particular number of hotspots to show their answer; for Selection, students select a specific hotspot to choose their answer.

Matching Interaction—an interaction grid that allows the students to select areas of matching between an option in the row with an option in the column.

Hot Text Highlight (List and Paragraph)—text is selectable, and once selected, will highlight for the students; for Line, the students can select one or more lines of text to answer the question; Hot text paragraph involves answers embedded within a paragraph(s). Students select a word(s), phrase(s), sentence(s), and/or paragraph(s) according to the instructions in the stem or question.

Order—a list of items or sentences that can be arranged by the student in the correct order.

How Scores are Reported

Scale Scores

Students receive an overall scale score in ELA and mathematics for each valid test. Scale scores are the basic unit of reporting. A scaled score is calculated from a total number of points the student scores on the item, statistically adjusted and converted into a consistent, standardized scale that permits direct and fair comparisons of scores from different forms of a test, either within the same administration year or across years. Established psychometric procedures are used to ensure that a given scale score represents the same level of performance regardless of the test form. Scale scores are especially suitable for comparing the performance of different groups of students in the same grade from year to year and for maintaining the same performance standard across the years. While scale scores are comparable across tests in a given content area within the same grade, they are not comparable across content areas or grades. Each overall scale score is indicated by a single number. An error band is noted for each scale score. The error band indicates the range of scores that the student would be likely to achieve if he or she were to take the test multiple times.

Performance Levels

Scale scores within each subject area can be described in ranges. The labels applied to these ranges are known as Performance Levels. The performance levels are:

- **Needs Support**—The student's performance is not yet proficient and indicates a minimal or partial understanding and application of key academic content standards defined for Michigan students. The student needs intervention and support to improve achievement.

- **Demonstrates Proficiency**—The student's performance indicates understanding and application of key academic content standards defined for Michigan students. The student needs continued support to maintain and improve proficiency.

- **Demonstrates Mastery**—The student's performance exceeds academic content standards and indicates substantial understanding and application of key concepts defined for Michigan students. The student needs support to continue to excel.

The divisions between the levels are often referred to as cut scores. The cut scores are recommended by a panel comprised of educators and other stakeholders throughout the state in a process known as standard setting. To set these standards, the panel uses detailed descriptions of what students in each of the performance levels should know and be able to do. Based upon these detailed descriptions and actual assessment items, the panel recommends the score that best separates each performance level from the next; the recommendations are made to the Michigan State Superintendent of Public Instruction, who approves the final cut scores and performance level ranges. While the performance level descriptors necessarily differ by grade and subject area, student achievement—as defined by the obtained performance level—can be reasonably compared across subjects within a grade. Such a comparison can be used to indicate whether students are meeting Michigan Academic Standards in each subject and grade.
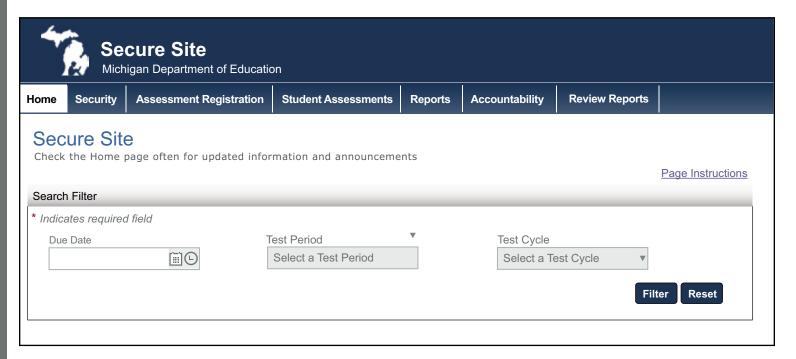
Michigan Department of Education **BENCHMARK ASSESSMENTS** Early Literacy & Mathematics		**2023-2024 Performance Level Scale Score Ranges**		
Subject	**Grade**	**Level 1 Needs Support**	**Level 2 Demonstrates Proficiency**	**Level 3 Demonstrates Mastery**
ELA	K	860-971	972-988	989-1020
	1	870-992	993-1023	1024-1060
	2	880-1007	1008-1031	1032-1100
Math	K	860-957	958-1006	1007-1020
	1	870-995	996-1035	1036-1060
	2	880-1006	1007-1057	1058-1100

Section 3: The Dynamic Score Reporting System

Early Literacy and Mathematics reports are available to school and district users through the Dynamic Score Reporting site which is accessible through the Secure Site. Detailed directions for accessing the Early Literacy and Mathematics reports are documented in the How to Access and Navigate Michigan's Dynamic Score Reporting Site document, which is located on the Early Literacy and Mathematics Benchmark Assessments web page (www.michigan.gov/earlylitandmath).
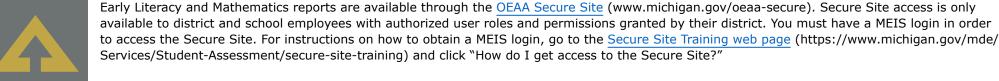
The Secure Site

Early Literacy and Mathematics reports are available through the OEAA Secure Site (www.michigan.gov/oeaa-secure). Secure Site access is only available to district and school employees with authorized user roles and permissions granted by their district. You must have a MEIS login in order to access the Secure Site. For instructions on how to obtain a MEIS login, go to the Secure Site Training web page (https://www.michigan.gov/mde/Services/Student-Assessment/secure-site-training) and click "How do I get access to the Secure Site?"
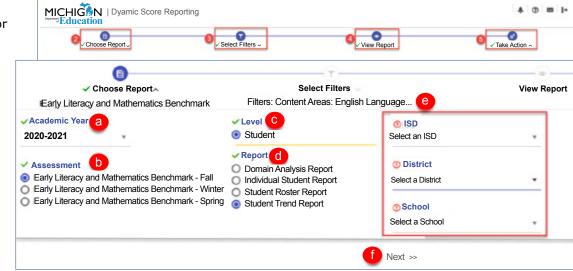
Features and Functionality

Michigan's Dynamic Score Reporting Site provides data for a variety of reports. Regardless of the selected report, users will encounter the following components:

1. **Welcome Page:** Provides detailed directions for accessing the reports based on user role.

2. **Choose Report:** Selecting Choose Report opens a menu to choose the following:

   a. Academic Year – will carry over from OEAA Secure Site

   b. Assessment – user will select Fall, Winter, or Spring

   c. Level

   d. Report – Option may include State, District, School, or Student (some options not available until data is aggregated.)

   e. District and School

3. **Select Filters:** The filter options may vary depending on the report that has been selected. Users may choose to filter on the following:

- Grades
- Content Areas
- Students
- Reporting Codes
- Performance Levels
- Economically Disadvantaged
- English Learner
- Ethnicity
- Former English Learner
- Foster Care
- Gender
- Homeless
- Homeschooled
- Migrant
- Military Connected
- Students with Disabilities
- Tested in Enrolled Grade

4. **View Report:** Select the View Report button to generate and open the requested report. (**Note:** your filter selections will remain in place until you select different filter options.)

5. **Take Action:** These options vary depending on the report.

   – **About This Report** - About This Report (ATR) is accessed from the Actions menu. This action opens a popup window that displays the information provided by MDE for this report.

   – **PDF Download** - To view a PDF of the report, select "PDF Download". This will open a PDF document of the reports, according to your selections in the filter area. You can print individual or small groups of reports from this option.

   – **CSV File Format** - The CSV File Format (comma-separated values) provides the format the CSV File Download will contain. It will show the Excel column, field name, description, field type, and format.

   – **CSV Download** - Users will have the ability to download the data for the reports that have been generated in a CSV format. The formats of these files can be found by selecting the CSV File Format from the Action menu. Any filters applied by the user will also be applied to data in the CSV file.

6. **Help:**

   – **Dynamic Score Reporting Guide** – user guide that describes how to access and navigate the Dynamic Score Reporting Site

   – **Interpretive Guide to Reports** – the Interpretive Guide to Early Literacy and Mathematics Benchmark Assessments Reports

Section 4: Reports

Student Level Data Reports

Individual Student Report

The Individual Student Report (ISR) provides information about student performance by content area. Each student will have a separate ISR for each content assessed. The report is divided into four main sections:

1 Student demographic information

2 Content Area Scale Score Summary — shows Overall Scale Score and Standard Error and Performance Level in a content area

3 Content Area Domain Summary — shows Raw scores for each assessment category in the assessment

4 Content Area Details — the Content Details section displays Points Earned out of Points Possible for each assessment category within a content area

Individual Student Report

Year: Spring 20XX | Assessment: Early Literacy and Mathematics Benchmark | ISD Code: 00000 | ISD Name: ABC ISD | District Code: 00000 | District Name: ABC Public Schools | School Code: 00000 | School Name: ABC School | Reporting Code: None

DOE, JOHN A | Grade 0 | Mathematics

UIC: 0000000000   Student ID: Gender: M   DOB: 00/00/0000   Ethnicity: White   Student with Disability: N   English Learner: N   Formerly LEP: N   Designated Supports: N

(1)

Mathematics Scale Score Summary

Test Cycle	Scale Score	Standard Error	Performance Level	Overall Scale Score		
				860-939 **Needs Support (NS)**	940-973 **Demonstrates Proficiency (DP)**	940-973 **Demonstrates Mastery (DM)**
Fall 20XX	900	±15	Needs Support	900 [Gray] - standard error		
Winter 20XX						
Spring 20XX						

(2)

Mathematics Summary

(3)

Domains	Points Earned / Points Possible			Change		
	Fall 20XX	Winter 20XX	Spring 20XX	Fall to Winter	Winter to Spring	Fall to Spring
Counting and Cardinality	6/8	5/8	6/8	▼	▲	●
Operations and Algebraic Thinking	5/5	3/5	5/5	▼	▲	◉
Number and Operations in Base Ten	1/2	1/2	0/2	●	▼	▼
Measurement and Data	2/4	2/4	2/4	●	●	●
Geometry	3/7	2/7	3/7	▼	▲	●

▼ Points Earned Decrease   ● No Change in Points Earned   ▲ Points Earned Increase   ◉ Earned All Points Possible on Fall 2016 & Spring 2017 Tests

Mathematics Details

(4)

Assessment Categories	Brief Descriptions of Academic Standards	Points Earned / Points Possible		
		Fall 20XX	Winter 20XX	Spring 20XX
Operations and Algebraic Thinking		5/13	4/13	9/13
Represent and solve problems involving addition and subtraction	Add/subtract within 20 to solve word problems; solve for addition of 3 whole numbers.	1/3	1/3	3/3
Understand and apply properties of operations and the relationship between addition and subtraction	Apply properties of operations to add/subtract; subtraction as an unknown-addend problem.	2/2	1/2	2/2

Student Demographic Information

This section provides identifying information about the student including name, grade, Unique Identification Code (UIC), and, if provided by the school, the district student ID, gender, date of birth, and race/ethnicity. The report will indicate if the student has been marked as a Student with Disability, English Learner, and Former English Learner in the Michigan Student Data System (MSDS). Additionally, the report will indicate if the student has been assigned designated supports.

Note about fall data: The fall Early Literacy and Mathematics Benchmark Assessment occurs before the official collection of MSDS data.

Content Area Scale Score Summary

This section provides the Overall Scale Score and Standard Error for all students taking the assessment. Over the 2021-2022 school year, the Early Literacy and Mathematics Benchmark Assessments are transitioning from reporting raw score (points earned out of points possible) to scale score for the overall content area. Anticipating a more "typical" school year this year, the Office of Educational Assessment and Accountability expects to work with educators next summer to establish performance or achievement levels for these assessments.

Content Area Domain Summary

In spring, the report will show Spring Points Earned out of Points Possible for all students taking the assessment in the spring. If the student also took the assessment in the fall and/or winter, then the Fall and/or Winter Points Earned/Points Possible and the corresponding Change will be populated. If the student did not take the assessment in the fall or winter, these columns will be blank. The Fall to Winter, Winter to Spring, and Fall to Spring Change will display one of the following symbols:

▼ a dark orange downward-facing triangle, indicating the student has a decrease in points earned from fall to spring

🟠 a light orange circle, indicating no change in points earned from fall to spring

🔺 a blue upward-facing triangle, indicating the student has an increase in points earned

🟢 a green circle, indicating a student has earned all points possible in both fall and spring

Content Area Details

Raw scores—points earned out of total points possible—are reported for each category in the spring assessment. In the spring report, if a student has results from both fall and spring, results from both tests will be displayed.

Note: Some categories are assessed using fewer than five items. Use caution when interpreting results based on a few items on the test. These results should be used within a comprehensive assessment system which includes formative assessment data.

Report Features

Filters

The list of students displayed for the Individual Student Report can be customized using the following filters:

- Grades – The grade filter defaults to the lowest grade tested. Multiple grades can be selected at one time.
- Content Areas – Content area filters default English Language Arts. Multiple content areas can be selected at one time.
- Students – Users can filter the report to include only selected students. The student filter has a predictive search feature: As the user enters letters, the list of students shortens.
- Reporting Codes
- Homeschooled
- Designated Supports
- Economically Disadvantaged
- English Learner
- Ethnicity
- Former English Learner

- Foster Care
- Gender
- Homeless
- Migrant
- Military Connected
- Students with Disabilities
- Tested in Enrolled Grade

Take Action

Take Action contains the following options for the Individual Student Report:

- About This Report
- PDF Download

Help

- Dynamic Score Reporting Guide
- Interpretive Guide to Reports

About the Data

- Overall scale scores for ELA and mathematics scores are reported.
- Raw scores (Points Earned/Points Possible) are reported for each domain, each assessment category, and for the content area total in ELA and math.
- Individual Student Reports marked "Warning" will display student scores and will provide the reason it is considered marked as warning. Warning reasons include Missing MSDS Data or the use of Nonstandard Accommodation.

- Individual Student Reports marked "Invalid" will display student scores and will provide the reason it is considered invalid. Since this test is not used for accountability, any invalid student scores will be displayed with a note providing the reason it is considered invalid such as Prohibited Behavior or Misadministration. The report user should take the information under consideration when interpreting and using the results.

Data Definitions

- **Assessment Categories:** a grouping of related standards
- **Brief Description of Academic Standards:** provides an abbreviated description of the content standards
- **Designated Support:** an assessment support made available to a student based on individual student need (Text-to-Speech for grade 2 is currently the only embedded designated support available)
- **Domains:** used to organize assessment categories
- **Raw Score:** Points earned/total points possible. Raw scores are not comparable across different forms of the test.
- **Scale Score:** test scores that have been statistically adjusted to a common scale that allows scores to be compared across different forms of the test.
- **Standard Error:** Educational measurements are attempts to capture a student's true score, or ability, in the area being assessed. The standard error around the student score is an estimate of the range of scores one would expect if the student was to be measured repeatedly with parallel assessments.
- **Tested in Enrolled Grade:** student is tested in the grade level that is reported in MSDS

Student Roster

The Early Literacy and Mathematics Benchmark Assessments Student Roster allows users to view the overall Scale Score, student Points Earned out of Points Possible (Max Points) for each domain by grade, content, domains and categories.

Report Layout

The report is divided into two main sections:

1 Student List

2 Overall Content Performance (Table Format)

Student Roster Report

Year: Fall 20XX | Assessment: Early Literacy and Mathematics Benchmark | ISD Code: 00000 | ISD Name: Demo ISD | District Code: 00000 | District Name: Sample District | School Code: 00000 | School Name: Sample School | Reporting Code: All

Grade 0 | English Language Arts

			Overall Scale Score [Gray] - standard error	Reading - Literacy Text			Reading - Informational Text			Reading - Foundational Skills			Writing			Language		
Students ▲ (Total = 4)	Scale Score	Standard Error	860-922 Needs Support / 923-953 Demonstrates Proficiency / 954-1020 Demonstrates Mastery	Key Ideas and Details	Integration of Knowledge and Ideas	Subtotal	Key Ideas and Details	Craft and Structure	Subtotal	Print Concepts	Phonological Awareness	Subtotal	Text Type and Purpose	Production and Distribution of Writing	Subtotal	Conventions of Standard English	Vocabulary Acquisition and Use	Subtotal
DOE, JANE A ℝ	948	9		3/5	0/1	**3/6**	5/5	1/1	**6/6**	4/5	2/5	**6/10**	3/5	1/1	**6/6**	0/5	3/3	**3/8**
DOE, JOHN A ⓘ	924	9		3/5	1/1	**4/6**	3/5	1/1	**4/6**	2/5	2/5	**4/10**	0/5	1/1	**1/6**	1/5	1/3	**2/8**
DOE, JANE B ⓘ	951	9		4/5	1/1	**5/6**	3/5	1/1	**4/6**	2/5	2/5	**4/10**	4/5	1/1	**5/6**	3/5	2/3	**5/8**
DOE, JOHN B ⓘ	906	10		1/5	0/1	**1/6**	1/5	1/1	**2/6**	0/5	2/5	**2/10**	2/5	1/1	**3/6**	1/5	1/3	**2/8**

Student List

The total of students (total) selected is displayed. Students are displayed in ascending alphabetical order by last name, then first name based on the selected filters. The sort sequence may be changed to sort in descending alphabetical order. The following data is displayed in the hover icon ⓘ :

1. Date of Birth (DOB)

2. Unique Identification Code (UIC)

3. The hover icon will display as ℝ, indicating there was an issue that flagged this student's test as warning or invalid. Review these scores carefully. The hover will display the reason such as Prohibited Behavior, Misadministration, Missing MSDS Data, and Not Tested in Enrolled Grade. The scores for the student will still be displayed.

Overall Content Performance (Table Format)

For each student, Overall Scale Score, Standard Error, Points Earned by assessment category, and domain subtotal are displayed. Scale Score and Points Earned by domain subtotal are sortable. The table below shows the domains for each content area.

Report Features

Filters

Filters that that can be applied to adjust the displayed students in the report include:

- Grades – The grade filter defaults to the lowest grade tested. Multiple grades can be selected at one time.
- Content Areas – Content area filters default English Language Arts. Multiple content areas can be selected at one time.
- Students– Users can filter the report to include only selected students. The student filter has a predictive search feature: As the user enters letters, the list of students shortens.

- Reporting Codes
- Designated Supports
- Economically Disadvantaged
- English Learner
- Ethnicity
- Former English Learner
- Foster Care
- Gender
- Homeless
- Migrant
- Military Connected
- Students with Disabilities
- Tested in Enrolled Grade

Sorting

The default for this report displays students in ascending alphabetical order by last name, then first name. The sort sequence may be changed to sort in descending alphabetical order. Overall Scale Score and Domain subtotals and are also sortable in either ascending or descending order.

Drill Down

The drill-down feature enables the user to select the student name on the Student Roster Report to open an Individual Student Report. After a user has selected a student name to drill down in the Individual Student Report and the Individual Student Report displays, a breadcrumb area appears below the Choose Report icon that displays "Student Roster Report > Individual Student Report". Each report name in the breadcrumb is an active link. To return to the Student Roster Report, the user selects "Student Roster Report".

Take Action

Take Action contains the following options for the Student Roster:

- About this Report
- CSV Download
- CSV File Format
- PDF Download

Help

- Dynamic Score Reporting Guide
- Interpretive Guide to Reports

About the Data

- Raw scores (Points Earned/Points Possible) are reported for each domain and assessed content category in ELA and math.

- The Student Roster report excludes homeschooled students.

- All "Review ®" student scores will be displayed on the Student Roster. Since this test is not used for accountability, any invalid student scores will be displayed with a note providing the reason it is considered invalid in the hover icon.

Data Definitions

- **Assessment Categories:** a grouping of related standards

- **Brief Description of Academic Standards:** provides an abbreviated description of the content standards

- **Designated Support:** an assessment support made available to a student based on individual student need (Text-to-Speech for grade 2 is currently the only embedded designated support available)

- **Domains:** used to organize assessment categories

- **Raw Score:** Points earned/total points possible. Raw scores are not comparable across different forms of the test.

- **Scale Score:** test scores that have been statistically adjusted to a common scale that allows scores to be compared across different forms of the test

- **Standard Error:** Educational measurements are attempts to capture a student's true score, or ability, in the area being assessed. The standard error around the student score is an estimate of the range of scores the student would likely achieve if he or she were to take the same test multiple times without additional instruction or learning.

- **Tested in Enrolled Grade:** student is tested in the grade level that is reported in MSDS

Domain Analysis Report

The Early Literacy and Mathematics Benchmark Assessments Domain Analysis Report allows users to view score summary data for a list of selected students. Tables display the Overall Content Area Scale Score and the number of Points Earned in each domain for each of the listed students. The list will display results for students who tested in the current test period. In the winter or spring, prior academic year test results will also be displayed for students who completed those earlier tests.

The heading shows the Overall Content Area Scale Score and the Domain name and the maximum Points Possible for that Domain. A legend shows the range of Points Earned for the three buckets. Users can select data by overall content area (English Language Arts or Mathematics) and/or by selected content domains.

Report Layout

The report is divided into two main sections:

1 Overall Content Scale Score Summary

2 Student List

3 Performance Tables

Overall Content Scale Score Summary

Overall Content Scale Score Summary has a table showing number of completed tests and the mean scale score of these tests. The scale score summary is also displayed in a graphical format. The Mean Scale Score is displayed by a vertical line. The scale score range is also shown on the graphic.
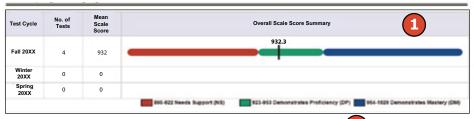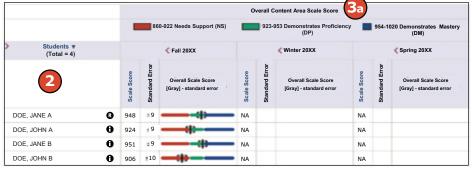
Student List

Students meeting the selected filter criteria are displayed in ascending alphabetical order by last name.

Domain Analysis Report
Year: Fall 20XX | Assessment: Early Literacy and Mathematics Benchmark | ISD Code: 00000 | ISD Name: ABC ISD | District Code: 00000 | District Name: ABC Public Schools | School Code: 00000 | School Name: ABC School | Reporting Code: All

Grade 0 | English Language Arts

Test Cycle	No. of Tests	Mean Scale Score	Overall Scale Score Summary
Fall 20XX	4	932	932.3
Winter 20XX	0	0	
Spring 20XX	0	0	

860-922 Needs Support (NS) | 923-953 Demonstrates Proficiency (DP) | 954-1020 Demonstrates Mastery (DM)

Overall Content Area Scale Score

860-922 Needs Support (NS) | 923-953 Demonstrates Proficiency (DP) | 954-1020 Demonstrates Mastery (DM)

Students ▼ (Total = 4)		Fall 20XX			Winter 20XX			Spring 20XX		
		Scale Score	Standard Error	Overall Scale Score [Gray] - standard error	Scale Score	Standard Error	Overall Scale Score [Gray] - standard error	Scale Score	Standard Error	Overall Scale Score [Gray] - standard error
DOE, JANE A	Ⓡ	948	9		NA			NA		
DOE, JOHN A	ⓘ	924	9		NA			NA		
DOE, JANE B	ⓘ	951	9		NA			NA		
DOE, JOHN B	ⓘ	906	10		NA			NA		

Students ▼ (Total = 4)		Reading - Literary Text 6 Points Possible		
		Fall 20XX	Winter 20XX	Spring 20XX
DOE, JANE A	Ⓡ	3	NA	NA
DOE, JOHN A	ⓘ	4	NA	NA
DOE, JANE B	ⓘ	5	NA	NA
DOE, JOHN B	ⓘ	1	NA	NA

Performance Tables

There are two different Performance Tables.

Content Area Scale Score Table (3a) - displays a table with scale score and standard error. Performance data for each selected student is also displayed in a graphical format. Scale Score is displayed by a vertical line, surrounded by a gray oval that shows the estimated range of scores the student would be expected to earn if the test was taken again. The width of the oval represents the Standard Error. The scale ranges of the benchmarks are provided.

Domain Performance Tables (3b) - The heading shows the Domain name and the maximum Points Possible for that Domain.

The selected list of students will display the points earned for the domain in fall. Winter and spring results will be incorporated during those administrations. NA will display if the student did not test.

Hovering over the information icon displays the following information:

1. Date of Birth (DOB)

2. Unique Identification Code (UIC)

The hover icon will display as icon ⓘ , indicating there was an issue that flagged this student's test as warning or invalid. Review these scores carefully. The hover will display the reason such as Prohibited Behavior, Misadministration, Nonstandard Accommodation, Missing MSDS Data, and Not Tested in Enrolled Grade. The scores for the student will still be displayed.

Report Features

Filters

Filters that that can be applied to adjust the displayed students in the report include:

- Grades – The grade filter defaults to the lowest grade tested. Multiple grades can be selected at one time.
- Content Areas – Content area filters default English Language Arts. Multiple content areas can be selected at one time.
- Students– Users can filter the report to include only selected students. The student filter has a predictive search feature: As the user enters letters, the list of students shortens.
- Reporting Codes
- Domains
- Designated Supports
- Economically Disadvantaged
- English Learner
- Ethnicity

- Former English Learner
- Foster Care
- Gender
- Homeless
- Migrant
- Military Connected
- Students with Disabilities
- Tested in Enrolled Grade

Sort Options

- **Student Name** – the initial display of the report is in alphabetical order. Users can click to sort in reverse alphabetical order.
- **Scale Score** (Fall/Winter/Spring) – selecting the header of Scale Score sorts the results from high to low on the first click, if clicked a second time the results sorts from low too high for the selected test period.
- **Domains** (Fall/Winter/Spring) – selecting the test period header sorts the Points Earned results from high to low on the first click, if clicked a second time the results sorts from low too high for the selected test period.

Drill Down

Hovering over any student name in a Performance Table displays the text "Drill Down to Individual Student" indicating that clicking on the name will transfer the user to the student's Individual Student Report.

After a user has selected a student name to drill down into the Individual Student Report and the Individual Student Report displays, a breadcrumb area appears below the Choose Report icon that displays "Domain Analysis Report > Individual Student Report". Each report name in the breadcrumb is an active link. To return to the Domain Analysis Report, the user selects "Domain Analysis Report''.

Take Action

Take Action contains the following options for the Domain Analysis:

- About this Report
- CSV Download
- CSV File Format
- PDF Download

Help

- Dynamic Score Reporting Guide
- Interpretive Guide to Reports

About the Data

- Domain Analysis Overall Content Area Scale Score section displays a list of students and their scale score
- The Domain Analysis report displays a student list divided into three groups based on Points Earned out of Points Possible for a domain or content area for the selected students.
- The Domain Analysis report excludes homeschooled students.
- The Domain Analysis report does not display students whose tests are marked Prohibited Behavior or Misadministration.

Data Definitions

- **Domains:** used to organize assessment categories

- **Raw Score:** Points earned/total points possible. Raw scores are not comparable across different forms of the test.

- **Scale Score:** test scores that have been statistically adjusted to a common scale that allows scores to be compared across different forms of the test.

- **Standard Error:** Educational measurements are attempts to capture a student's true score, or ability, in the area being assessed. The standard error around the student score is an estimate of the range of scores the student would likely achieve if he or she were to take the same test multiple times without additional instruction or learning.

- **Tested in Enrolled Grade:** student is tested in the grade level that is reported in MSDS

- **Designated Support:** an assessment support made available to a student based on individual student need (Text-to-Speech for grade 2 is currently the only embedded designated support available)

Student Trend Report

The Early Literacy and Mathematics Benchmark Assessments Student Trend Report displays up to three years of historical Early Literacy and Benchmark Assessments score data.

The report is divided into three main sections:

1   Student Demographic Information

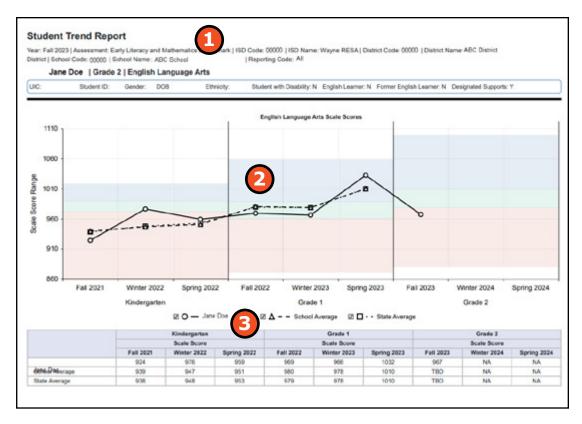**2**   Trend Graph

3   Data Table

Student Demographic Information

This section provides identifying information for the current reporting cycle about the student including name, grade, content area, Unique Identification Code (UIC), and, if provided by the school, the district student ID, gender, date of birth, and race/ethnicity. The report will indicate if the student has been marked as a Student with Disability, English Learner, or Former English Learner in the Michigan Student Data System (MSDS). Additionally, the report will indicate if the student has been assigned designated support (Text-to-Speech for grade 2 is currently the only embedded designated support available).

Trend Graph

The graph allows the user to see up to three academic years of results at the student, school, and state levels. The graph displays the percentage of points earned over past test cycle(s). Beside the graph

there is an interactive legend which allows for the user to select/de-select student, school average, and state average data points and trend lines.

The graph display is shaded at each grade level, indicating the performance level ranges. Performance Levels are Demonstrates Mastery, Demonstrates Proficiency, and Needs Support.

Hovering over student data points will display Grade, Scale Score, and Performance Level for the student's tests. Hovering over school or state data plots will display the grade and average scale score

Data Table

Three rows of data will appear in this table:

- **Student –** "Last Name, First Name, Middle Initial". The scale score will be displayed for all test cycles with a completed test.
- **School Average –** displays the school average scale scores for all the cycles listed. TBD will be displayed in the current test cycle until the aggregate data is available after the test window closes.
- **State Average –** displays the state average scale score for all the cycles listed. TBD will be displayed in the current test cycle until the aggregate data is available after the test window closes.

Report Features

Filters

Filters that that can be applied to adjust the displayed students in the report include:

- Grades – The grade filter defaults to the lowest grade tested. Multiple grades can be selected at one time.
- Content Areas – Content area filters default English Language Arts. Multiple content areas can be selected at one time.
- Students – The student filter has a predictive search feature: As the user enters letters, the list of students shortens.
- Reporting Codes
- Homeschooled Performance Levels
- Designated Supports
- Economically Disadvantaged
- English Learner
- Ethnicity
- Former English Learner
- Foster Care
- Gender
- Homeless
- Migrant
- Military Connected
- Students with Disabilities
- Tested in Enrolled Grade

Go to Student

Once reports have been generated, the Go to Student link allows the user to go directly to the selected student and display the selected student's report.

Hover Text

Hovering over the student data points will display Grade X, Scale Score, and Performance Level.

Take Action

Take Action contains the following options for the Student Trend Report:

- About this Report
- PDF Download

About the Data

Scale Scores are reported for the content area total in English Language Arts and math.

Student Trend Reports marked "Warning" or "Invalid Reason" will display student scores since this test is not used for accountability. A note providing the reason it is marked warning or invalid will be displayed.

Data Definitions

Designated Support: this is an assessment support made available to a student based on individual student need (Text-to-Speech for grade 2 is currently the only embedded designated support available).

Scale Score: Scale scores are test scores that have been statistically adjusted to a common scale that allows scores to be compared across different forms of the test.

Tested in Enrolled Grade: a student is tested in the grade level that is reported in MSDS.

Aggregate Data Reports

Demographic Report

The Demographic Report provides a comparison of students by grade and content, aggregated across selected demographic groups, showing the average points earned and Mean Scale Score and Standard Deviation. The Demographic Report is available at the School, District, and State levels.
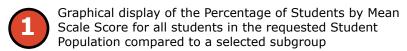
The population of students to be displayed may be selected by the user. Users may select from the following student populations:
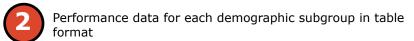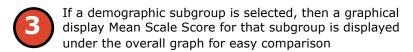
All Students—this is the default

All Except Students with Disabilities—students who are not marked Special Education in the MSDS at the time of testing

Students with Disabilities—students who are marked Special Education in MSDS at the time of testing

After the user selects a grade to view, all tested content for that grade is displayed sequentially in alphabetical order. The report is divided into several main sections:

1 Graphical display of the Percentage of Students by Mean Scale Score for all students in the requested Student Population compared to a selected subgroup

2 Performance data for each demographic subgroup in table format

3 If a demographic subgroup is selected, then a graphical display Mean Scale Score for that subgroup is displayed under the overall graph for easy comparison

Graphical Display

- **All students** in the selected student population, grade, and content area are displayed in a bar graph based on overall scale score. The legend beneath the graph provides percentage of points earned ranges.

- **Demographic subgroup** – The user may select up to eight demographic subgroups in the demographic table to compare against the overall student population. The selected demographic subgroup will be highlighted and a double bar graph of overall mean scale score will display next to the overall student population.

Performance Data Table

Performance data, including the number of students assessed, mean scale score, and standard deviation are displayed for demographic subgroups in a table.

The demographic subgroups reported are:

- Gender
  - Male
  - Female
- Ethnicity
  - American Indian or Alaska Native
  - Asian
  - Black or African American
  - Hispanic or Latino
  - Native Hawaiian or Other Pacific Islander
  - Two or More Races
  - White
- Additional Reporting Groups
  - Economically Disadvantaged: Yes
  - Economically Disadvantaged: No
  - English Learner: Yes
  - English Learner: No
  - Former English Learner: Yes
  - Former English Learner: No
  - Foster Care: Yes
  - Foster Care: No
  - Homeless: Yes
  - Homeless: No
  - Migrant: Yes
  - Migrant: No
  - Military Connected: Yes
  - Military Connected: No
  - Students with Disabilities: Yes
  - Students with Disabilities: No
  - Tested in Enrolled Grade: Yes
  - Tested in Enrolled Grade: No
  - Designated Support: Yes
  - Designated Support: No

Report Features

Drill Down

The drill-down feature that enables the user to select the link in the Number of Students Assessed column to open a Student Roster Report which includes the students represented in the aggregated group. When the Number of Students Assessed is zero, the "<" sign is not an active link. **Note:** In some instances, the number of students displayed may differ between the School Demographic Report and the generated Student Roster Report. This is because the Demographic Report does not include invalid tests, while the Student Roster Report does include invalid tests.

After a user has selected the link to drill down into the represented aggregate group, a breadcrumb area appears below the ISD/District/School entity information that displays "Demographic Report – School > Student Roster". Each report name in the breadcrumb is an active link. To return to the School Demographic Report, the user selects "Demographic Report – School".

The drill-down feature is not available on the State or District level Demographic Reports.

Take Action

The Take Action menu appears and contains the following options for the Demographic Report:

- About this Report
- PDF Download
- CSV Download
- CSV File Format

Help

- Dynamic Score Reporting User Guide
- Interpretive Guide to Reports

Change Report

The Early Literacy and Mathematics Benchmark Assessments Change Report displays **Number of students assessed** and the pre-test and post-test **Mean Scale Score** for **Matched Students**. A Matched Student is a student that has a completed pre-test and a post-test. The table also displays the student counts at each Performance level for the pre-test and post-test.

The report also displays, for the current test cycle, the total **Number of Students Assessed** and the associated **Mean Scale Score** for the pre- and post-tests.

The Change Report is available at the School, District, and State levels.

Grades – The grade filter defaults to the lowest grade tested. Multiple grades can be selected at one time.

Content Areas – Content area filters default English Language Arts. Multiple content areas can be selected at one time.
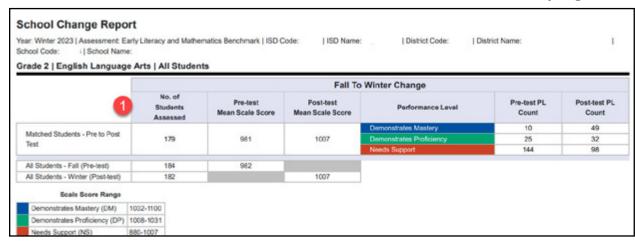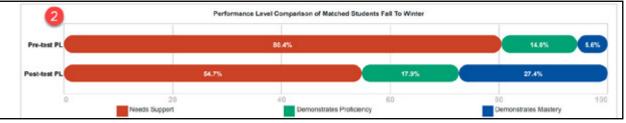
Report Layout

The report is divided into two main sections:

① A header above each table will display the two test cycles being used for the change table. In the winter it will display change tables for: **Fall to Winter**.

In the spring, it may display the following change tables based on what tests were administered through the academic year: **Fall to Spring** or **Winter to Spring**.

Matched students – Students who completed both the pre-test and post-test. For the matched students, the table displays the number of students assessed and the Mean Scale Score. It also displays the number of students at each performance level for both the pre-test and post-test.

The table will also display the total number of students assessed, the Mean Scale Score for All Students in the pre-test test and all students in the post-test, since all students may not have completed both the pre-test and post-test.

② The graph displays the percentage of students at each of the three performance levels for the pre-test and post-test.

School Change Report

Year: Winter 2023 | Assessment: Early Literacy and Mathematics Benchmark | ISD Code: | ISD Name: _ | District Code: | District Name: |
School Code: ↓ | School Name:

Grade 2 | English Language Arts | All Students

	No. of Students Assessed	Pre-test Mean Scale Score	Post-test Mean Scale Score	Performance Level		Pre-test PL Count	Post-test PL Count
				Fall To Winter Change			
Matched Students - Pre to Post Test	179	981	1007	Demonstrates Mastery		10	49
				Demonstrates Proficiency		25	32
				Needs Support		144	98
All Students - Fall (Pre-test)	184	982					
All Students - Winter (Post-test)	182		1007				

Scale Score Range

Demonstrates Mastery (DM)	1032-1100
Demonstrates Proficiency (DP)	1008-1031
Needs Support (NS)	880-1007

② Performance Level Comparison of Matched Students Fall To Winter

	Needs Support	Demonstrates Proficiency	Demonstrates Mastery
Pre-test PL	80.4%	14.0%	5.6%
Post-test PL	54.7%	17.9%	27.4%

Section 5: Additional Resources

Additional Sources of Assessment Results

OEAA Secure Site Data Files

Data files are available for download by authorized school and district users under the Student Test Scores tab of the OEAA Secure Site (https://baa.state.mi.us/BAASecure/Login.aspx).

Student Data File

The Student Data File contains detailed individual student data in an excel file. This data includes school information, student demographic data, test administration data, and student performance data. Student Data Files are available on the OEAA Secure Site (https://baa.state. mi.us/BAASecure/Login.aspx).

The student data file information includes:

    School information—student ISD, district, and school code

Excel Column	Field	Descriptor	Field Type (length)	Format
A	TestCycle	Early Literacy and Mathematics test period and fiscal year	text(20)	
B	ISDCode	ISD code number	varchar(5)	99999
C	DistrictCode	District code number	varchar(5)	99999
D	SchoolCode	School code number	varchar(5)	99999
E	FeederSchoolCode	Prior school number that student attended	varchar(5)	99999
F	Grade	Student grade	varchar(2)	
G	LastName	Student last name	varchar(25)	
H	FirstName	Student first name	varchar(25)	
I	MiddleInitial	Student middle initial	char(1)	
J	Gender	Student's gender M=Male, F=Female	char(1)	

Student Demographic Data—includes grade, name, gender ethnicity, UIC, Date of Birth; also includes subgroup information including Economically disadvantaged, Special Education, Limited English Proficiency, Migrant status and Homeschooled information.

    Test Administration Data—includes valid or invalid test, if invalid, includes reason for invalidation of the test, also includes whether student received accommodations

    Student Performance Data—includes raw score data for ELA and mathematics

The Student Data File is provided for schools to use as a data resource for school or district level data reviews. Schools or districts can use the Student Data File to manipulate and evaluate data in ways that support School Improvement goals or other data-based-decision making purposes.

Aggregate Data File

Aggregate Data File—includes aggregated school information, student population, demographic group, and student performance data

School information—ISD, district, and school information included in the selected report

Demographic Data—such as Gender, Ethnicity, Economically Disadvantaged, Migrant status, or Other are included, based on the data contained in the selected report

The Aggregate Data File is provided for schools to use as a data resource for school- or district-level data reviews. Schools or districts can use the Aggregate Data Files to evaluate data in ways that support school improvement goals or other data-based decision-making purposes.

Aggregate Change File

Aggregate Change File—includes aggregated school information, student population, demographic group, and student performance data

School information—ISD, district, and school information included in the selected report

Demographic Data—such as Gender, Ethnicity, Economically Disadvantaged, Migrant status, or Other are included, based on the data contained in the selected report

Change Data—the following pre-test and post-test data:

- Mean Points Earned
- Change in mean points earned
- Mean Percent of Points Earned
- Change in mean percent of points earned

It also provides the percent of students who had a decrease, no change, or an increase in points earned when comparing the pre-test and the post-test.

The Aggregate Change Data File is provided for schools to use as a data resource for school- or district-level data reviews. Schools or districts can use the Aggregate Change Data Files to evaluate data in ways that support school improvement goals or other data-based decision-making purposes.

MiLearn

The Michigan Linked Educational Assessment Reporting Network (MiLearn) is a Michigan Department of Education service that delivers state assessment data electronically to students, parents, and educators directly through the district's Student Information System (SIS). MiLearn is updated daily using data from the Michigan Data Hub to reflect student enrollment changes.

When users log into the SIS, no second login or password is needed to access MiLearn. The user clicks a "State Assessment Data" link in the SIS to access MiLearn and their reports. Currently, districts on the Michigan Data Hub that use PowerSchool, MISTAR, Skyward, Infinite

Campus, or Synergy as their SIS are able to integrate this free service. If your district is not yet on the Michigan Data Hub, contact support@michigandatahub.org.

The MiLearn system has been designed with flexibility and convenience for districts. Districts control who sees their data. District administrative staff configure their system security to locally govern which data is provided to their users. Since MiLearn receives rostering updates nightly, local data is always current and reflects the current school and district enrollment. This also means available state assessment results for new students in the district can be seen the next day.

Currently, MiLearn houses three years' worth of data for Early Literacy, M-STEP (including PSAT, SAT, and ACT), WIDA, and MI-Access results. Early Literacy and Mathematics Benchmark Assessments reports will be available soon. For more information on MiLearn, please contact Tim Hall at hallt@michigan.gov.

General Resources

- For instructions on how to obtain access to the Dynamic Score Reporting Site, go to Secure Site Training web page (www.michigan.gov/mde/Services/Student-Assessment/secure-site-training) and click **How do I get access to the Secure Site?**

- General additional resources are available on the Early Literacy and Mathematics web page (www.michigan.gov/earlylitandmath)

  – Early Literacy and Mathematics Benchmark Test Administration Manual (TAM)

  – Statewide Summative Assessments Calendars

  – Online Practice for English Language Arts and Mathematics

Also, be sure to sign up for the OEAA Spotlight on Student Assessment and Accountability Newsletter (www.michigan.gov/mde-spotlight) for weekly up-to-date information about Statewide Summative Assessments.

Section 6: Contact Information

School administrators, teachers, and counselors should become familiar with the report layouts and information contained in this document. If you have questions after reviewing this Interpretive Guide to reports, or need additional information about Early Literacy and Mathematics Benchmark Assessments administration procedures, content, scheduling, and/or appropriate assessment accommodations for students with disabilities or English Learners (ELs), please contact the Michigan Department of Education Office of Educational Assessment and Accountability (OEAA), using the contact information listed below:

Office of Educational Assessment and Accountability

Andrew Middlestead, Director, OEAA

Kate Cermak, Manager, Test Administration and Reporting

Tim Tahaney, Test Administration and Reporting

John Jaquith, Manager, Test Development

Nichole Mosser, ELA Consultant

Kyle Ward, Mathematics Consultant

Open, K-5 Consultant

Jennifer Paul, Ph.D., Assessment Consultant for English Learners

Ji Zeng, Ph.D., Lead Psychometrician, Psychometrics

Phone: 1-877-560-8378, option 3

Fax: 517-335-1186

Website: www.michigan.gov/earlylitandmath

E-mail: mde-oeaa@michigan.gov